

Serial No. 09/940,247
Docket No. NEC 2360
Amendment B under Rule 116

AMENDMENTS TO THE CLAIMS:

Please amend claims 1 and 2, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended): A method for forming a metal silicide layer in a self-aligned manner on a source region, a drain region and a gate electrode of a semiconductor device formed on a semiconductor substrate, said method comprising the steps of:

(A) depositing a cobalt film over an entire surface of said semiconductor device formed on said semiconductor substrate,

(B) forming a ~~metal silicide~~ silicidized cobalt film layer on said source region, drain region and said gate electrode by performing a heat treating thereof, and

(C) etching away an unreacted cobalt film remaining on said semiconductor substrate while leaving the metal silicide layer intact, using as an etching solution an admixture solution ~~made~~ consisting essentially of hydrochloric acid, hydrogen peroxide, and water, having relative concentration ratio thereof ranging from 1:1:5 to 3:1:5, at a solution temperature of 25 to 45°C, with an etching time of 1 to 20 minutes.

Claim 2 (currently amended): The method as claimed in claim 1, wherein said metal ~~silicide layer comprises a~~ silicidized cobalt film layer comprises a silicidized cobalt selected from the group consisting of dicobalt silicide, cobalt monosilicide and cobalt disilicide.

Claim 3 (previously presented): The method according to claim 1, wherein said heat treating of step (B) is conducted at a temperature of 500°C or higher.

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Claim 4 (previously presented): The method as claimed in claim 3, and further comprising a Step (D) of heat treating the product resulting from Step (C) at a temperature higher than a temperature of heat treating in Step (B).

Claim 5 (previously presented): The method as claimed in claim 4, wherein said heat treating of Step (D) is conducted at a temperature of 800°C.

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